



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW7105G00231-3G

Job Sheet 183990



Part No: RBW7105G00231-3G

Job Qty: 2 ea

Part Name: Engine Lifting Tool



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/1/18

Job Tracking No:

Due Date: 12/17/18

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBW7105G00231-3G Rev 10 IPP Rev A 18.01.26 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	2 pcs	1	12/17/18	0.00	0.00	Purchasing		DEC 28 2018
110	Packaging	2 pcs		12/17/18	0.00	0.00	Packaging2		DEC 28 2018
120	QC	2 pcs		12/17/18	0.00	0.00	QC6		DEC 31 2018
121	Small Fab	2 pcs		12/17/18	0.00	1.00	Small Fab-7		MLL DAS 9-89
122	QC	2 pcs		12/17/18	0.00	0.00	QC5		DAS 38
130	Packaging	2 pcs		12/17/18	0.00	0.00	Packaging3		DAS 28 9-89
140	QC21-FG	2 Ea		12/17/18	0.00	0.00	QC21		DAS 21 7-89 JAN 07 2010

Part Op 100 - Issue P/O: 041199 MANUFACTURE RBW7105G00231-3G AS PER DWG Supplier: METEC -Certificate of Descriptions: conformity is required ***Exclude Placard and any stickers***

121 - 1-Load test as per DWG RBW7105G00231-3G WEIGHT TEST. 2-Fill out first article weight test form. 3-Engrave and install placard as per DWG. 4-Apply emblem -27 and -29 as per DWG.

oct 01, 2018 x 2 Rk

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW7105G00231-3GP	Engine Lifting Tool	2 pcs (1 ea)	100-Purchasing	5140745
90081A077	Drive Screw	8 Ea (4 ea)	121-Small Fab	5048290
RB41011	Dart Tooling Placard, Aluminum	2 Ea (1 ea)	121-Small Fab	5021040
RBW7105G00231-3G-27	Emblem	2 Ea (1 ea)	121-Small Fab	5047583
RBW7105G00231-3G-29	Emblem	2 Ea (1 ea)	121-Small Fab	5047584

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW7105G00231-3GP	2	0	0
121-Small Fab	90081A077	8	88	0
	RB41011	2	771	0
	RBW7105G00231-3G-27	2	4	0
	RBW7105G00231-3G-29	2	4	0

Part Specifications

Specifications could not be found.



Container No: S140746



Part: RBW7105G00231-3G

Job No: 183990

Serial No/Batch: S140746

Revision: 10

Inspector:

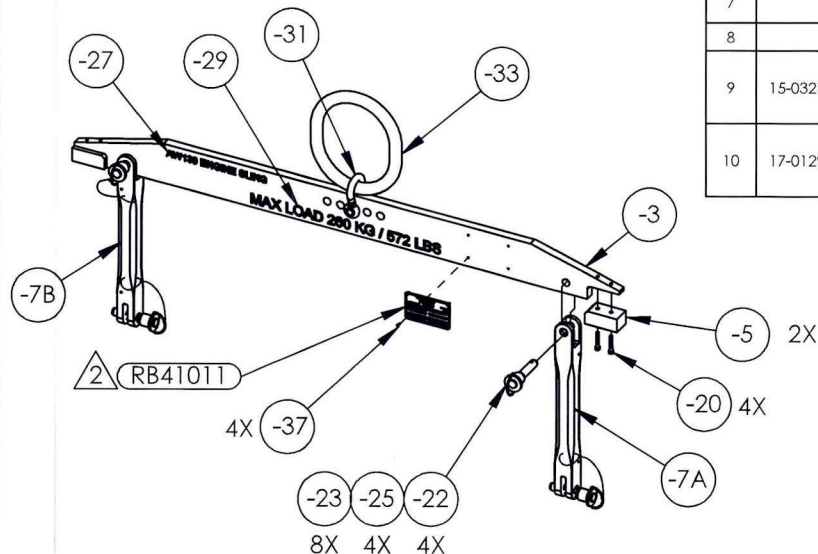
Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

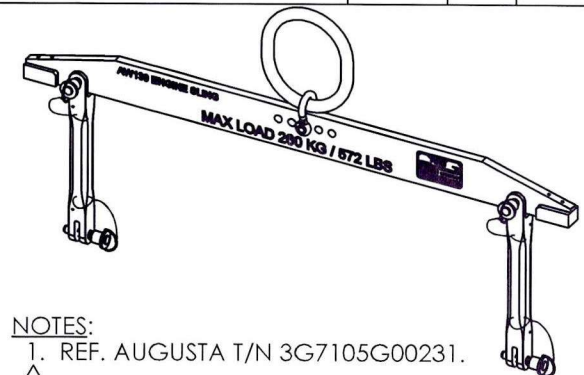
Date: 12/28/18

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ASSY -7B	ASSY -7A	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-3	1	SPREADER BAR	6061-T6		2
			-5	2	BLOCK	6061-T6		3
			-7A	1	RIGHT ARM	6061-T6		4
			-7B	1	LEFT ARM	6061-T6		5
		B/O	-20	4	SOCKET HEAD CAP SCREW	STEEL	10-24 X 1-1/8 (MCMaster-CARR #91251A248)	1
		B/O	-22	4	QUICK RELEASE PIN	S.S.	Ø1/2 X 1-1/2 USABLE (MCMaster-CARR #92384A092)	1
		B/O	-23	8	FERRULE	ALUMINUM	Ø1/16 X 3/8 (MCMaster-CARR #3896T31)	1
		B/O	-25	4	LANYARD	COATED STEEL	Ø1/16 X 12 (CARR LANE #CL-2-C)	1
		B/O	-27	1	EMBLEM	VINYL	BLACK, CUT VINYL (SIGNS NOW)	6
		B/O	-29	1	EMBLEM	VINYL	BLACK, CUT VINYL (SIGNS NOW)	7
		B/O	-31	1	7/16" SCREW PIN SHACKLE	STEEL	3/4 X 1/2 X 1-1/2 (MCMaster-CARR #3560T46)	1
		B/O	-33	1	OBLONG LINK	STEEL	Ø3/8 X 2-1/2 X 3-1/2 (MCMaster-CARR #3119T2)	1
		B/O	-37	4	DRIVE SCREW	COATED STEEL	#2 X 1/4 (MCMaster-CARR #90081A077)	1
		B/O		1	DART PLACARD	ALUMINUM	RB41011	1
ASSY -7B	ASSY -7A							

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		DELETED 2 SPLIT RINGS & THEIR HOLES IN -7A & -7B, WRAP LANYARD AROUND -7A & 7B PER D.W.	3/25/2009	WP	DW
2		CH'D -5, -7A & -7B MATERIAL WAS A36 IS 1018 PER D.W.	1/13/2010	WP	DW
3		CH'D MAX. LOAD FROM 260 KG TO 572 LBS., CH'D -3 THICKNESS FROM .590 TO .625, CH'D -7A & 7B HOLES FROM Ø.512 TO Ø.500 & END DIM'S. FROM .300 TO .310, CENTER OPENING FROM .610 TO .630, & END RADIUS FROM .605 TO .625, CH'D -9 Ø FROM 1.024 TO 1.00 PER D.W.	5/12/2010	RJC	RW
4		CH'D MAX. LOAD EMBLEM -29, CH'D -7A, -7B, -11 & ADDED -31, -33 BOM INFO, ADDED REF. DIMS. -3, -7A, -7B, CH'D -7A & -7B DIM'S FROM .630 TO .640 +.010/-0.00, & .321 TO .331 +.010/-0.00 PER S.E.	4/26/2011	RJC	RW
5		ADDED -7A & -7B STRESS RELIEVE PER R.W. CORRECTED Ø.551 PLACEMENT PER G.E. ADDED NOTE 1 -7A & -7B, ADDED -37 PER R.W.	6/27/2011	RJC	RW
6		REPLACED -9, -11, -13, -15, -17, & -19 WITH -22. ADDED -37. CH'D DIM'S FROM .XXX TO .XX ON NON-CRITICAL PARTS. -7A & -7B CH'D HOLES WAS Ø.500 AND .551 IS 2X Ø.500-.505 ✓ Ø.56 X 45°	8/7/2013	RJC	DW
7		DELETED -1, CH'D -3 FROM 1018 TO 6061, CH'D -5 TO BOLT ON, CH'D -7A & 7B TO ASSY, ADDED -10, -12, -14, -16, -18 & -20.	10/4/2013	JAG	DW
8		DELETED -10, -12, -14, -16, & -18. CH'D -7A & -7B WAS ASSY IS SINGLE PIECE, WAS 1018 IS 6061	1/23/2014	PMW	DW
9	15-0327	UPDATED TO NEW DRAFTING STANDARDS. CH'D PLACARD TO DART, REMOVED DASH NO. AND DELETED DWG. ADDED ENGRAVE PLACARD NOTE. -3 CH'D DIM WAS 1.00 IS 5X 1.00. -7A & -7B CH'D DIMS WAS .64 IS .69, WAS .31 IS .28, WAS .33 IS .34 +.01 -.00. ADDED DIMS 2X TRUE Ø.09 THRU ALL, 2.60, 2.60, 2X .31.	10/8/2015	DPD	JAG
10	17-0129	-3 CH'D DIM'S WAS 26.94 IS (26.94), WAS 2X .80 IS 3X .80. ADDED DIM'S 4X Ø.089 ✓.25, 2X .65, 2X 1.700, 2X 2.950, 2X 4.23, ADDED NOTE △, -5 CH'D DIM WAS 2X Ø.201 THRU ALL L J Ø.375 ✓.19 IS 2X Ø.221 THRU ALL L J Ø.375 ✓.19. -7A, 7B ADDED NOTE △. -37 CH'D B/O INFO WAS 1/8 #90081A074 IS #2 X 1/4 #90081A077.	6/1/2017	RJC	JAG



NOTES:

- REF. AUGUSTA T/N 3G7105G00231.
- ENGRAVE RB41011 PLACARD WITH T/N, S/N, "SWL 260 KG/572 LBS," "WEIGHT TESTED TO 390 KG/ 858 LBS."

DART AEROSPACE	
TITLE AW139 ENGINE SLING	
DWG NO. RBW7105G00231-3G	REV 10
MAT'L HEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/
DRAWN BY: RJC 06/01/2017	1. BREAK ALL SHARP EDGES Ø15 X 45° OR .Ø15R
CHECKED: SM 06/01/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: AA 06/05/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: JL 06/13/2017	USED ON MODEL AW139
APPROVED: JAG 06/29/2017	
SCALE 1:12	DATE 6/1/2017
SHEET 1 OF 7	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041199**

Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO041199
PO Date: 10/1/18
Due Date: 12/17/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Revision

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	183987	RBW6205G00632-3GP			Sling, Main Rotor Blade Lift As per Dwg RBW6205G00632-3G Rev. 6	Firmed	-	12/17/18	3 pcs	0 pcs	3 pcs	\$6,548.85/pcs	\$19,646.55
Line Item Note: SIOP													
2	183988	RBW6205G11532-3GP			Swashplate Support Stand As Per Dwg RBW6205G11532-3G REV 5	Firmed	-	12/17/18	2 pcs	0 pcs	2 pcs	\$8,811.00/pcs	\$17,622.00
Line Item Note: SIOP													
3	183990	RBW7105G00231-3GP			Engine Lifting Tool As Per Dwg RBW7105G00231-3G Rev. 10	Firmed	-	12/17/18	2 pcs	0 pcs	2 pcs	\$2,879.00/pcs	\$5,758.00
Line Item Note: SIOP													
4	183991	RBW7105G00131-3GP			Engine Transport Stand As Per Dwg RBW7105G00131-3G Rev. 6	Firmed	-	12/17/18	2 pcs	0 pcs	2 pcs	\$4,717.00/pcs	\$9,434.00
Line Item Note: SIOP													
												Grand Total:	\$52,460.55



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041199

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 10/1/18 11:58 AM dart.Lussier.Patrick

Packing List

Bill Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Ship Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Att. Patrick Lussier

Shipment No: 24438
Shipment Date: 21-Dec-2018
Ship Via: Pick up at METEC
Order Number: 3064
Order Date: 10/01/18

Customer Code: DART
Phone: (613) 632-9577
PO Number: PO041199 R3
Terms: Net 60 Days

----- Quantity -----								Job
<u>Item</u>	<u>Open</u>	<u>Shipped</u>	<u>B/O</u>	<u>Canceled</u>	<u>Unit</u>	<u>Description</u>	<u>Revision</u>	<u>Number</u>
3	1	1	0	0	EA	DART-RBW7105G00231-3GP Engine Lifting Tool, drawing # RBW7105G00231-3G Rev.10	10	3064-01

The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.

Received In Good Order By
 Att. Patrick Lussier



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	Dwg Rev.#	P.O. Number
1 ✓	DART-RBW7105G00231- 3GP ✓	Engine Lifting Tool, drawing # RBW7105G00231-3G Rev.10	10	41199 R3 ✓

MATERIAL: supplied by METEC

DAS
68
9-89

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.

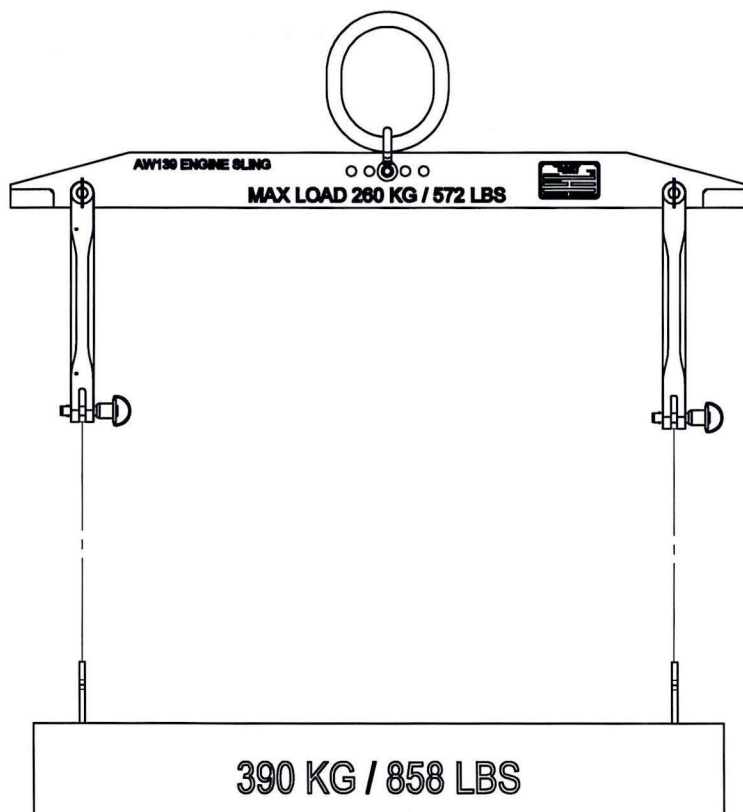
George Theoret

Vankleek Hill, December 20, 2018

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL
			APPROVED

FIRST ARTICLE WEIGHT TEST



INSPECTION & TESTING PROCEDURES FOR THE RBW7105G00231-3G AW139 ENGINE SLING. THIS ASSEMBLY SHOULD BE INSPECTED BEFORE EACH USE.

REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED OF DAMAGE BEFORE USING!

FIRST ARTICLE WEIGHT TEST

1. AFTER INSPECTION, PLACE SLING ASSEMBLY ON A OVERHEAD LIFTING DEVICE. ATTACH APPROPRIATE TEST WEIGHT OF 390 KG/858 LBS. AS SHOWN.
2. LIFT WEIGHT FOR AT LEAST 5 MINUTES, CONTINUALLY CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
3. REMOVE WEIGHT AND RE-INSPECT SLING, CHECKING FOR STRESS CRACKS, BENDING, OR DISTORTIONS.

INSPECTOR George Theoret

TESTER George Theoret

S.N. _____

DATE Dec. 20/2018

DAS
68
9-89

DART AEROSPACE	
TITLE AW139 ENGINE SLING	
DWG NO. RBW7105G00231-3G	REV 10
MAT'L HEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125° ✓
DRAWN BY: RJC 06/01/2017	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: SM 06/01/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: AA 06/05/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: JL 06/13/2017	USED ON MODEL
APPROVED: JAG 06/29/2017	AW139
SCALE 1:10	DATE 6/1/2017
SHEET 1 OF 1	